

In the Claims

Please amend Claim 33; and delete Claim 32 as follows:

1. (Previously Presented) An antenna, comprising:

a ground plane having an upper surface and an opposing lower surface;

a plurality of dipoles extending outwardly from the upper surface;

a set of feedlines disposed proximate the upper surface and coupled to the dipoles;

a set of striplines disposed upon the lower surface and coupled through the ground plane to the set of feedlines, wherein the set of striplines have a plurality of serpentine portions each having a respective said dielectric member slidingly disposed thereupon; and

at least one sliding dielectric member adjustably disposed proximate a portion of the set of striplines and adapted to shift a phase velocity of a signal communicating therewith to the dipoles.

2. (Original) The antenna as specified in Claim 1 wherein the dipoles are configured in sets, each of the dipole sets having a single respective feedline coupled thereto.

3. Canceled

4. (Previously Presented) The antenna as specified in Claim 2 wherein the dipoles are configured in pairs of orthogonal dipoles and the set of feedlines comprise a divider.

5. (Previously Presented) The antenna as specified in Claim 1 further comprising an electrically non-conductive member disposed between the ground plane and the set of striplines.

6. (Original) The antenna as specified in Claim 5 wherein the set of striplines are disposed on the electrically non-conductive member.

7. (Original) The antenna as specified in Claim 6 wherein the set of feedlines are spaced

above the ground plane and separated therefrom by an air dielectric.

8. Canceled

9. (Original) The antenna as specified in Claim 1 further comprising at least one cable extending across said lower surface and coupled to the set of striplines.

10. (Previously Amended) An antenna array comprised of a plurality of antennas, each antenna comprising:

a ground plane having an upper surface and an opposing lower surface, the ground plane having bent edges adapted to control a lateral beam lobe of the respective antenna;

a plurality of dipoles extending outwardly from the upper surface wherein a portion of the ground plane bent edge is angled inwardly toward the dipoles and is configured to improve a front-to-back ratio of the antenna array.

11. (Original) The antenna array as specified in Claim 10 wherein each said antenna is coupled to another adjacent said antenna such that the dipoles of each antenna extend outwardly, and the respective ground planes of each antenna generally face inwardly towards one another.

12. (Original) The antenna array as specified in Claim 11 wherein the coupled antennas collectively form a multi-sector antenna array extending 360°.

13. (Original) The antenna array as specified in Claim 12 comprising 3 of the antennas, each of the antennas covering generally a 120° sector.

14. (Original) The antenna array as specified in Claim 10 further comprising a plurality of adjustment members, one said adjustment member being coupled to each of the sliding dielectric members of each of the antennas, the adjustment members adapted to adjust a beamtilt of the respective antenna.

15. Canceled

16. (Previously Presented) The antenna array as specified in Claim 10 wherein the ground plane edges each have at least 2 bends.

17. (Previously Presented) The antenna array as specified in Claim 10 wherein the antennas are physically coupled to one another along their respective bent edges, but are electrically isolated from one another by an electrically non-conductive member.

18. (Original) The antenna array as specified in Claim 10 wherein the dipoles are configured in sets, each of the dipole sets having a single respective feedline coupled thereto.

19. Canceled

20. (Previously Presented) The antenna array as specified in Claim 2 wherein the dipoles are configured in pairs of orthogonal dipoles and the set of feedlines comprise a divider.

21. (Original) The antenna array as specified in Claim 20 further comprising an electrically non-conductive member disposed between the ground plane and the set of striplines.

22. Canceled

23. (Previously Presented) The antenna array as specified in Claim 31 wherein the set of feedlines are spaced above the ground plane and separated therefrom by an air dielectric.

24. Canceled

25. (Original) The antenna as specified in Claim 10 further comprising at least one cable extending across said lower surface and coupled to the set of striplines.

26. (Previously Amended) The antenna as specified in Claim 10 further comprising a radome encompassing the antenna, the radome comprised of an electrically non-conductive material having at least one metal portion thereon.

27. (Original) The antenna as specified in Claim 26 wherein the metal portion is a electrically conductive paint.

28. (Original) The antenna as specified in Claim 10 wherein the antenna array is configured as an omnidirectional antenna.

29. (Previously Presented) An antenna, comprising:

a ground plane having an upper surface and an opposing lower surface;

a plurality of dipoles extending outwardly from the upper surface;

a set of feedlines disposed proximate the upper surface and coupled to the dipoles;

a set of striplines disposed upon the lower surface and coupled through the ground plane to the set of feedlines; and

at least one sliding dielectric member adjustably disposed proximate a portion of the set of striplines and adapted to shift a phase velocity of a signal communicating therewith to the dipoles;

an electrically non-conductive member disposed between the ground plane and the set of striplines; and

a second ground plane disposed on the electrically non-conductive member and opposing the set of striplines.

30. (Previously Presented) An antenna array comprised of a plurality of antennas, each antenna comprising:

a ground plane having an upper surface and an opposing lower surface;

a plurality of dipoles extending outwardly from the upper surface;

a set of feedlines disposed proximate the upper surface and coupled to the dipoles;

a set of striplines disposed upon the lower surface and coupled through the ground plane to the set of feedlines, wherein the set of striplines have a plurality of serpentine portions each

having a respective said dielectric member slidingly disposed thereupon; and

at least one sliding dielectric member adjustably disposed proximate a portion of the set of striplines and adapted to shift a phase velocity of a signal communicating therewith to the dipoles.

31. (Previously Presented) An antenna array comprised of a plurality of antennas, each antenna comprising:

a ground plane having an upper surface and an opposing lower surface;

a plurality of dipoles extending outwardly from the upper surface;

a set of feedlines disposed proximate the upper surface and coupled to the dipoles;

a set of striplines disposed upon the lower surface and coupled through the ground plane to the set of feedlines, wherein the set of striplines are disposed on the electrically non-conductive member;

at least one sliding dielectric member adjustably disposed proximate a portion of the set of striplines and adapted to shift a phase velocity of a signal communicating therewith to the dipoles; and

a second ground plane disposed on the electrically non-conductive member and opposing the set of striplines.

32. Cancelled

33. (Currently Amended) An antenna array as specified in Claim 10 32 wherein the ground plane bent edge has a first portion angled away from the dipoles, and a second portion angled towards the dipoles.

34. (Previously Amended) An antenna array as specified in Claim 33 wherein the first portion angles upwardly with respect to the ground plane, and the second portion angles upwardly with respect to the first portion.